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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,161	05/23/2000	Paul Lapstun	NPX016US	9177

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AUSTRALIA

EXAMINER

ABDULSELAM, ABBAS I

ART UNIT PAPER NUMBER

2674

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/575,161

Applicant(s)

LAPSTUN ET AL.

Examiner

Abbas I Abdulsalam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-55,57-111 and 113-131 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-55,57-111 and 113-131 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-7, 17-18, 22-23, 29-31, 33-42, 49-55, 57-61, 71-72, 83-85, 87-100, 103-111, 113-115 and 125-131 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (USPN 6152370) in view of Teufel et al. (USPN 6243503) and Ito et al. (USPN 5612720).

Regarding claims 1-2, 53-54 and 109-110, Ackley teaches a reader (50) constructed to read and decode collection symbols formed on surfaces, and includes a sensor (54) receiving a light reflected from the bar code and converts the received light into electrical signal. Specifically, Ackley discloses a receiver or converter (56) receiving the electric signal from the sensor (54) and converts it into a signal to be processed by a programmed computer or processor (60). See col. 5, lines 18-67. Ackley teaches a processor (60) determining which elements in the symbol (53) are resolved by identifying certain peaks and valleys in order that reliable data in the profile is distinguished. See col. 10, lines 3-11. Ackley also teaches that the processor determines if the profile is in-focus and if so, in step (108) the processor decodes the profile. See col. 8, lines 39-54 and Fig 5A. Further, Ackley discloses a decoding circuit (416) performing, distance determination (116), creating lost element matrix (120) as well as identifying and filling in decode matrix for unresolved elements. See col. 25, lines 33-43 and Fig. 5B. In

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addition, Ackley discloses the circuitry decoding the bar code in a way where a user must constantly move the reader to place a given bar code within focus for the reader so as to read that bar code. See col. 3, lines 4-18. Moreover, Ackley teaches a processor with respect to data collection symbiology reader (50) reading data from any linear, stacked area, and other machine-readable symbiology. See Fig 1 and co. 5, lines 34-45. Ackley's disclosure includes a method of receiving light reflected from the symbol and producing an output signal that represents the shapes and spaces. Ackley's method also includes identifying a plurality of portions in the "wide feature signal" corresponding to the shapes and spaces.

However, Ackley does not teach generating data indicative of the sensing device's position relative to the interface surface. Teufel on the other hand teaches a motion detector unit (202) for recording the given position of the data acquisition device (200) relative to the image plane (20). See col. 10, lines 13-19, 64-67, col. 11, lines 1-4, Fig. 17, (202), Fig 18B and Fig. 19(A-B).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ackley's method of decoding data collection symbols to adapt Teufel's motion detector (202). One would have been motivated in view of the suggestion in Teufel that the motion detector serves the same purpose and can be equivalently used to obtain the desired sensing device's position relative to the interface surface. The use of motion detector helps function data acquisition device more effectively as taught by Teufel.

Ackley has been described above. However, Ackley does not disclose a sensing device having a memory containing identifying data indicative of an identity of a user. It

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on the other hand teaches a coordinate indicating device enabling to output the device identifier stored in itself and the characteristics character data. For example, Ito teaches the pen identifier (116) to the electronic pen (101) that can be stored in a ROM (107). See col. 6, lines 66-67, col. 7, lines 1-7 and Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Ackley's system of decoding to adapt Ito's method of device identification. One would have been motivated in view of the suggestion in Ito that the device identification system can be equivalently used to provide the desired identity of a user. The use of device identification helps systems for processing information including classification of coding and decoding as taught by Ito.

Regarding claims 3, 55 and 111, Ackley teaches that the processor (60) determines which elements in the symbol (53) are resolved by identifying orientation of peaks. See col. 10, lines 3-11. In addition, Ito teaches also that the coordinates indicating device enables to output the device identifier stored itself and the characteristics character data so that the coordinates sensing device may identify the coordinates indicating device. See col. 3, lines 1-9.

Regarding claims 5, 57 and 59, Teufel teaches a motion detector unit (22) along with processing unit (7) for recording the given position of the position of the data acquisition device (200). Teufel also teaches the use of photodiodes (229, 230) for detecting the movement of the data acquisition device. See Fig. 19.

Regarding claims 52, 58 and 106-108, Ackley teaches a processor (60) and a sensor (54) in the reader (50). See col. 5, line 46. Ackley also indicates that the sensor can be any area imager (col. 5, lines 52-55). See Fig. 1.

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Regarding claims 60-61 and 114-115, Ackley teaches a processor (60) or a computer program, which processes the converted signal received from a sensor (54). See col. 5, lines 56-58.

Regarding claims 29, 31, 35-36, 83, 85, 113 and 129-131, Teufel teaches detection of a larger section of an image plane (20), the motion detector (2) detecting the movement of reading device (1) along with marked surface, and transmitting to signal processing unit (7).

Regarding claims 33-34, 37-42, 49-51, 87-100 and 103-105, Ackley teaches the use of an area symbology, which refers to any symbology such as Data matrix or Code One that employs a matrix of data cells. See col. 5, lines 43-47. Ackley further teaches that the sensor (54) views a projected line of light and produces a signal that is representative of an image of the reflection, and the image includes displacements of the line that occurs at transitions between raised and recessed portions of the symbol (53). See col. 6, lines 9-15.

Regarding claims 17-18, 22 and 71-72, Ito teaches an operation for identifying the individual. Ito teaches that the operation includes steps where a user inputs a signature and the main unit (803) performs comparisons for the purpose of verification. See col. 13, lines 54-67, col. 14, lines 1-9, Fig. 8 and Fig. 9.

Regarding claims 30, 84 and 125-128, Ito discloses a system for identifying an individual, the system including image data or stroke data of a signature or a reciting number that is stored as information for identifying an individual See col. 13, lines 25-30.

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Regarding claims 6-7 and 23, Ackley teaches that a processor (60) determines the type of symbol from which a given profile was generated and by so doing identifies the region. For example, Ackley shows the identification of large valley (the large bar) at the end of the profile next to a high peak (the quiet zone). See col. 22, lines 23-32.

2. Claims 8-16, 19-21, 24-28, 32, 43-48, 62-70, 73, 74-82, 86, 101-102 and 116-124 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in view of Ito and Teufel, and in further view of wright, Jr. (USPN 5704029).

Regarding claims 10-13, 15, 24, 64-67, 69-70, 76, 78, 118-119 and 120-124, Ackley as modified has been discussed above. In particular Ito teaches a handwriting device including an electronic pen (101) for writing and a main unit (102) having a tablet and providing a dictionary for recognizing handwritten characters. Ito teaches that the main unit includes a CPU for controlling, and a tablet (111) for indicating the inputted data. See col. 7, lines. See col. 1, lines 13-23, col. 7, lines 10-17 and Fig. 1.

However, Ackley as modified does not teach the use of interactive elements which include “checkbox field”, “text filed”, and drawing field”. Wright on the other hand teaches a computer program creating a set of field structures representing the electronic form, and the data representing the electronic form that can be sent to another computer for graphic display. See col. 3, lines 28-40. Specifically Wright discloses a computerized forms system (100) including a form engine (124), which includes field status records (310), draw field function (316) and a state (351), which determines field text state or numeric state. See Fig.1 and Fig. 8.

Therefore, It would have been obvious to one having skill in the art at the time the invention was made to further modify Ackley's modified system of coding and decoding to adapt Wright's form engine (124) including the fields. One would have been motivated in view of the suggestion in Wright that the form engine (124) as configured in Fig. 8 equivalently provides the desired interactive elements. The use of fields defining the electronic form allows a bar code reader to function effectively as taught by Wright. (see col. 28, lines 31-36).

Regarding claims, 8, 62, 77 and 116, Wright teaches forms engine (124), which include a draw field function (316), which in turn includes a step of drawing value from data array (450). See Fig. 8 and Fig. 9a.

Regarding claims, 9, 43-45, 63, 81 and 117, Wright teaches the forms engine software that is written in Newton Script programming language. See col. 7, lines 63-67 and Fig. 9, (440, 444,446). Wright also teaches an automated forms system where only one displayable item is visible any one time.

Regarding claims, 14, 19-21, 68 and 73-75, Wright teaches that a user utilizes the PDA to make a statement on the form, and then the form engine executes on the PDA and interprets one field at a time. Following the completion of the form, the data is transferred to another computer. See the abstract.

Regarding claims 25-28, 32, 46-48, 79-82, 86 and 101-102, Wright teaches optical character recognition forms, (OCR) forms which can be printed and discloses exemplary field data structure printed form as shown in Fig. 2.

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Conclusion

3. The prior art made of record and not relied upon is considered to applicant's disclosure. The following art are cited for further reference.

U.S. Pat. No. 6,607,133 to Wilz et al.

U.S. pat. No. 6,286,760 to Schmidt et al.

4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abduselam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.

Abbas Abdulsalam

Examiner

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January 5, 2003



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600